

Preliminary Metallurgical Test Work on Maronan Shows Exceptional High-Grade Silver in Lead Concentrates & Excellent Grades of Copper Concentrates

Maronan Metals is pleased to report positive results from early-stage metallurgical research on the previously untested pyroxene-hosted lead-silver and mixed copper sulphide ore types at Maronan.

HIGHLIGHTS

Pyroxene-hosted lead-silver sulphide ore type:

- Assays on the lead sulphide mineral concentrates returned high silver grades, up to 1,485 g/t at 51% lead, underlining the very high co-product silver content of the Maronan lead ores.
- This ore type is easy to grind and can be classified as "Medium Soft to Medium" adding to its processing advantage.
- Silver is recovered with the lead sulphide mineralisation which floats well under simple and readily available reagent regimes.
- Recoveries of 95% for lead and 84% for silver can be achieved at a medium-fine grind size.
- Future optimisation of the flotation reagents including iron sulphide suppression is expected to produce concentrate grades > 60% lead increasing payable levels of lead and silver.

Mixed copper-gold sulphide ore types:

- Preliminary flotation test work on the mixed mineral, copper sulphide ore types (primary and transitional) returned recoveries of 85-90% copper.
- Assays on the copper sulphide mineral concentrates returned grades of 25-27% copper, 11-14 g/t gold with highly variable silver contents of 31-515 g/t.
- Optimisation of the flotation reagent regimes plus gravity concentration may improve these recoveries.
- Importantly, results show a saleable product can be concentrated from the shallower, mixed mineral ore types – making these nearer to surface copper resources available for possible early development.

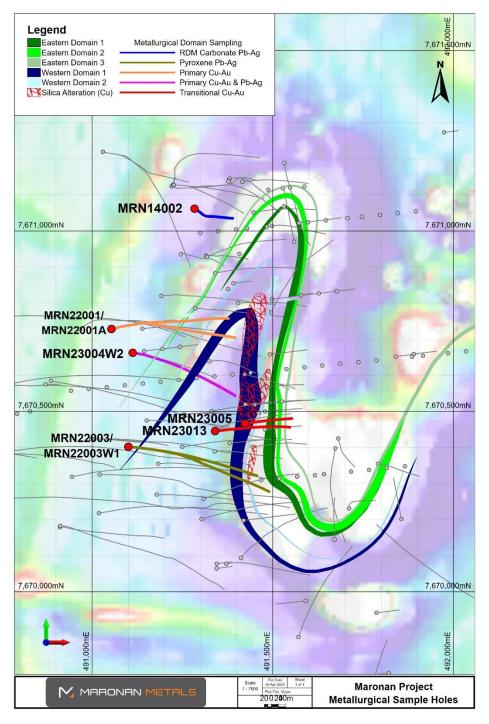
Maronan Metals Ltd (ASX: MMA) (Maronan or the Company) is an Australian mineral explorer focused on realising the growth potential of the advanced Maronan Silver-Lead and Copper-Gold deposit in the Cloncurry region of Northwest Queensland. The Maronan Project is one of Australia's largest and highest-grade, undeveloped silver resources located just 90km north of the giant Cannington Silver-Lead-Zinc Mine.



Maronan Metals's Managing Director Richard Carlton Commented:

"This latest metallurgical test work highlights the high-value proposition of the Maronan ores, and combined with historic studies on the carbonate-hosted lead-sulphide ore-type, provides key data for future optimisation test work.

It is expected that the processing and mining advantages defined by these positive preliminary metallurgical tests will translate into very industry competitive capital and operating costs at Maronan".



[Figure 1] Plan view of Maronan drilling showing the location of drillholes for which metallurgical test work samples have been selected, coloured by mineralisation domain.



Silver-Lead Mineralisation

Maronan lead-silver mineralisation can be simply classified as carbonate-hosted and pyroxenehosted ore-types for metallurgical test work. The Shallow Starter Zone is estimated to comprise about 60%-70% of the carbonate-hosted ore type and 30-40% of the pyroxene-hosted ore type.

Metallurgical test work by Red Metal in 2015 on the soft carbonate-hosted ores from the Northern Fold Structure (MRN14002, Figure 1) showed high recoveries of lead (92-96%) and silver (91-94%) could be easily achieved on coarsely ground (212 micron) ore. Processing of this ore type produced a high-value lead sulphide mineral concentrate grading 70-75% lead and containing 776-932 g/t silver as a precious metal co-product (refer ASX:RDM 29 July 2015 and Table 1 below). The Bond Ball Mill Work Index for the carbonate-hosted ore ground to 212 micron was 8.4 kWh/t which, on the Denver Hardness Scale, classifies this ore type as "Soft to Medium-Soft" (Table 2).

Results from Maronan Metals recently completed metallurgical research on the previously untested pyroxene-hosted lead-silver mineralisation are summarised below.

Pyroxene-hosted Silver-Lead Mineralisation

Core samples of typical pyroxene-hosted ore type were collected from the Eastern Horizon at the south end of the deposit in drill holes MRN22003 and MRN22003W1 for early stage "sighter" metallurgical test work (Figure 1 and Appendix 3). This ore type was subject to flotation test work as well as Geopyora rock breakage tests to provide preliminary comminution parameters, including Bond Ball Mill Work Index results.

The preliminary flotation conditions for the rougher tests were guided by the previous test work on the carbonate-hosted ore type. A simple reagent regime using SEX and 3418A collector, without pH modification or depressants, was also used. The P80 grind sizes for the tests were 75 and 212 micron.

Test work has shown that silver is recovered with the lead sulphide mineralisation which floats well under simple and readily available reagent regimes. **Recoveries of 95% for lead and 84% for silver** can be achieved at a medium-fine grind size (Table 1).

Assays on the lead sulphide mineral concentrates returned high *silver grades, up to 1,485g/t at 51% lead*, underlining the very high co-product silver content of the Maronan lead ores. Higher grades and recoveries were achieved with the finer, 75 micron, grind size (Table 1).

The resulting concentrates from these unoptimised trials contain 12-14% iron, mostly as iron sulphides pyrite and pyrrhotite, which is expected to be easily removed using iron sulphide suppression methods. Future optimisation of the flotation reagents is expected to produce concentrate grades > 60% lead increasing payable levels of the lead and silver.

Deleterious elements within these concentrates are below penalty rates (Appendix 2) with the exception of fluorine which can be removed from concentrates through acid leaching in the presence of aluminum sulphate – a method currently employed at the near-by Cannington Mine.

Comminution work show the Bond Ball Mill Work Index for the pyroxene-hosted ore, corrected to 150 micron, is 12.4 kWh/t classifying this ore type on the Denver Hardness Scale as "Medium Soft to Medium" (Table 2).



The "Soft to Medium" character of both the carbonate-hosted and pyroxene-hosted ore types should offer significant processing and mining advantages at Maronan.

[Table 1] Maronan Project: Summary of the better performed bench scale flotation tests on the carbonate-hosted and pyroxene-hosted ore types to date.

Test	Sample Number	Process	Lead Grade%	Lead Recovery	Silver Grade g/t	Silver Recovery
Carbonate-hosted (2015)	FT1	75 micron grind Cumulative 1 st and 2 nd Rougher	70	96	776	93.6
Carbonate-hosted (2015)	FT4	212 micron grind Cumulative 1 st and 2 nd Rougher/Cleaner	75	92	932	90.8
*Pyroxene-hosted (2024)	FT-P03	FT-P03 75 micron Rougher/Cleaner	51	95	1,485	84
*Pyroxene-hosted (2024)	FT-P02	212 micron Rougher	46	93	1,251	81
*Pyroxene-hosted (2024)	FT-P01	75 micron Rougher	48	97	1,419	90

*This concentrate contains 12-14% iron mostly as pyrite and pyrthotite which is expected to be easily removed using iron sulphide suppression methods, producing concentrate grades > 60% lead increasing payable levels of lead and silver.

[Table 2] Bond Work Ball Mill Index (kilowatt hour/tonne), Denver Hardness Scale. The Bond Ball Mill Work Index is a measure of the energy needed to grind ore to a specific size. It is an important factor when assessing potential processing costs as energy consumption is a significant part of the total milling cost.

Property Bond Work Index (kWh/t)	Soft 6.5	Medium-Soft 9	Medium 12	Medium-Hard 15	Hard 18
Carbonate-hosted 75 micron (2015)			12.19		
Carbonate-hosted 212 micron (2015)	8.4	4			
Pyroxene-hosted 150 micron (2024)			12.4		
Cu-Au Ore 75 micron (2024)				14.0	

Copper-Gold Mineralisation

Primary copper mineralisation occurs as disseminated and vein-controlled chalcopyrite associated with iron sulphide (pyrrhotite) and silica alteration.

A funnel-shaped zone of localised deep weathering occurs adjacent to and on the south side of the east-west trending mafic dyke (Figure 2). Secondary copper sulphide species within the deep weathered zone include chalcocite, bornite, covellite, digenite plus native copper which extends from about 100 metres to 600 metres below surface. No malachite or azurite have been observed.



Copper sulphide ore has been defined into three subtypes:

- Weathered containing visible native copper and some chalcocite.
- Transitional containing chalcocite, bornite, covellite, digenite and variable chalcopyrite with minor native copper and variable galena.
- Primary containing fresh chalcopyrite with variable galena.

First pass metallurgical tests work has been run on three separate **lower-grade and mixed mineral** ore types (Table 3 and Appendix 3). A weathered transitional type containing mixed copper sulphide species of chalcocite, bornite, chalcopyrite and minor native copper; a fresh chalcopyrite sample, and a fresh chalcopyrite-galena sample (Figure 1).

The preliminary flotation test work returned excellent recoveries of **85-90% copper**. Assays on the copper sulphide mineral concentrates returned grades of **25-27% copper**, **11-14** g/t gold with highly variable silver contents of **31-515** g/t (Table 3).

Good copper and reasonable precious metal recovery are achieved with minimal iron sulphide (pyrite/pyrrhotite) recovery from both the primary and transition samples using the selective MBS/A9863 collector reagent scheme at a P80 grind size of 75 micron. The copper concentrate grade is very good for low-grade, mixed mineral ore types and contains variable gold, silver and lead credits which add to its value.

The primary sulphide ore sample with a 1:1 copper to lead ratio was successfully treated using a sequential copper and lead flotation scheme with a MBS/A9863 reagent (Table 3 and Appendix 3). Transitional secondary copper sulphides also responded well to the MBS/A9863 reagent.

Optimisation of the flotation reagent regimes plus gravity concentration is expected to improve all metal recoveries.

Deleterious elements within the copper concentrates are mostly below penalty rates with the exception of elevated fluorine and to a lesser extent chlorine (Appendix 2). These can be reduced by either fluorine concentrate leach or concentrate regrinding which will be addressed with future studies.

Importantly, early copper metallurgical results show a saleable product can be concentrated from the shallower, mixed mineral ore types – making these nearer to surface copper resources available for possible early development.

Ongoing Program

Further metallurgical optimisation research will be undertaken building on the preliminary test work completed to date. The next drill program will include holes that target representative zones of each mineralisation type to enable:

- Comminution test work.
- Optimisation flotation test work on composite samples representing each flotation ore type.
- Variability flotation test work on a selection of spatial composites from each ore type.
- Preliminary settling test work for tailings thickening and tailings deposition.
- Concentrate leaching test work to reduce fluorine.

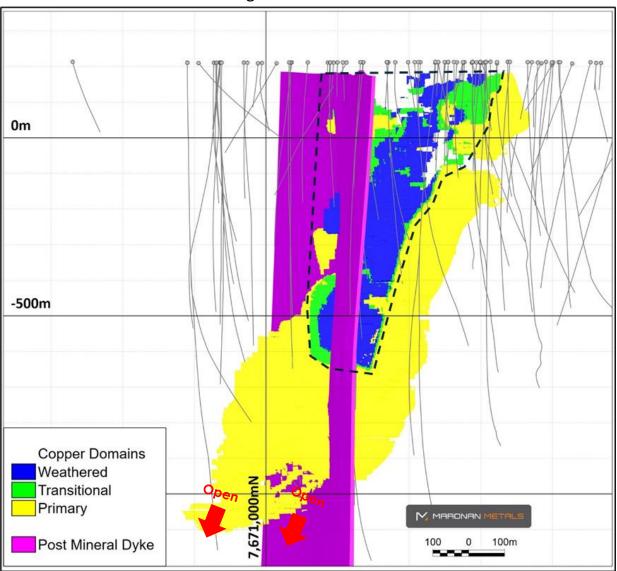


Test	Head Grade	Recovered %	Concentrate Grade
Low-grade Primary Ore Cu-Au & Pb-Ag			
Copper %	0.87	85	27.2
Gold g/t	0.8	44.9	14
Silver g/t	7.6	16.2	45
Sequential Lead Concentrate			
Lead %	0.83	46.6	45.0
Gold g/t	0.8	11.8	11
Silver g/t	7.6	21.8	193
Low-grade Primary Ore Cu-Au-Ag			
Copper %	0.76	90.4	25.0
Gold g/t	0.6	61.9	14
Silver g/t	2.8	29.8	31
Low-grade Transition Ore Cu-Au-Ag			
Copper %	1.19	86.6	25.0
Gold g/t	1.5	39.2	14
Silver g/t	33.9	62.7	515

[Table 3] Copper sulphide batch test work metallurgical performance summary by copper ore type.



Long Section View to East



[Figure 2] Copper-gold mineralisation domains, coloured by ore type, showing the location of the post-mineral dyke and the depth extent of weathering.

-ENDS-

This announcement was authorised by the Board of Maronan Metals Limited.

For further information on the Company, please visit: maronanmetals.com.au

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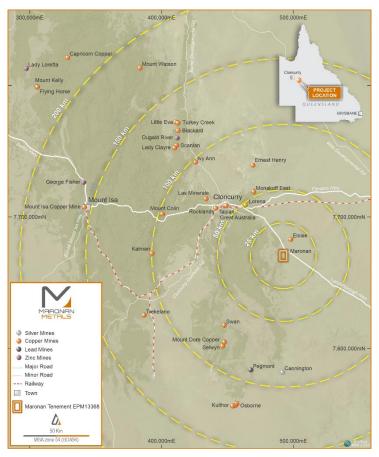


Maronan Metals Limited (ASX:MMA) is an Australian mineral explorer focused on realising the growth potential of the advanced Maronan copper-gold and silver-lead deposit in the Cloncurry region of northwest Queensland - one of Australia's most productive mineral provinces.

As at 2024, the Maronan project contains JORC 2012 compliant Inferred and Indicated Resources of:

- 32.1 Mt @ 6.1% lead with 107 g/t silver (using >3% lead cut-off grade) including
 - 2.1 Mt @ 5.3% lead with 155 g/t silver (using >3% lead cut-off grade) Indicated Resource,
- 32.5 Mt @ 0.84% copper with 0.61 g/t gold and 7 g/t silver (using >0.4% copper cut-off grade),
- 1.8 Mt @ 1.24 g/t gold (using >1.0 g/t gold cut-off grade).

Work to date has reinforced our understanding of the deposit's geometry and significant size potential while metal and grade variations allow considerable flexibility and optionality in how the resources can be appraised.



COMPETENT PERSONS STATEMENT

The information in this report that relates to Exploration Results is based on and fairly represents information and supporting documentation compiled by Mr Andrew Barker, who is a member of the Australian Institute of Geoscientists (AIG). Mr Barker is the Exploration Manager for Maronan Metals Limited. Mr Barker has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2012 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves" (the JORC Code). Mr Barker consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.



APPENDIX 1 JORC CODE, 2012 EDITION – TABLE 1

1.1 Section 1 Sampling Techniques and Data

(Criteria in this section apply to all succeeding sections.)

Criteria	JORC Code explanation	Commentary
Sampling techniques	 Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling. Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used. Aspects of the determination of mineralisation that are Material to the Public Report. In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information. 	 Samples are half-core, sampled from diamond drill core. Core has been cut using an automatic corewise core saw. Samples comprised the remaining half core intervals from drill core that had previously been submitted for geochemical assays Samples have been submitted for metallurgical testwork to ALS Burnie for sighter testwork on pyroxene style lead-silver mineralisation and for different fresh and weathered copper mineralisation.
Drilling techniques	 Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face- sampling bit or other type, whether core is oriented and if so, by what method, etc). 	 MRN22001A - Diamond Drilling. PQ: 0 - 60m; HQ3: 60 - 306.5m; NQ2: 306.5 - 423.7m; NQ3: 423.7 - 801.7m MRN22001 - Diamond Drilling. Wedged below MRN22001A at 306.5m. HQ3: - 306.5m - 764.7m: NQ2: 764.7m - 921.7m. MRN22003 - Diamond Drilling. Drilled PQ from 0 - 62.7m; HQ from 62.7m - 209.5m. NQ2: - 209.5m - 685m. MRN22003W1 - Diamond Drilling. Wedged off MRN22003 at 146.6m downhole. NQ2: 146.6m - 659.5m: MRN23004W2 - Diamond Drilling. Wedged off



Criteria	JORC Code explanation	Commentary
		 MRN23004 from 178.5m. HQ3: 178.5 – 720.6m MRN23005 – Diamond Drilling. PQ3: 0 – 62.6m; HQ3: 62.6 –272.6m MRN23013 – Diamond Drilling. PQ3: 0 – 68.7m; HQ3: 68.7 – 381.7m HQ and NQ Drill core is oriented using the Reflex ACT3 digital orientation tool
Drill sample recovery	 Method of recording and assessing core and chip sample recoveries and results assessed. Measures taken to maximise sample recovery and ensure representative nature of the samples. Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material. 	 Previously reported MRN22001A – ASX:MMA 15/9/2022 MRN22001 – ASX:MMA 24/11/2022 MRN22003/MRN22003W1 – ASX:MMA 16/1/2023 MRN23004W2 – ASX:MMA 20/6/2023 MRN23005 – ASX:MMA 29/5/2023 MRN23013 – ASX:MMA 20/9/2023
Logging	 Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies. Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography. The total length and percentage of the relevant intersections logged. 	 Drill core has been logged for lithology, alteration and mineralization and geotechnical RQD has been recorded. Specific Gravity measurements have been taken using the Archimedes Method (Dry Weight/(Dry Weight – Wet Weight). Magnetic Susceptibility reading have been collected using a K10 Magnetic Susceptibility machine. Logging of lithology and alteration is qualitative. Logging of sulphide mineralization is considered to be semi-quantitative in nature. All drill core has been photographed The total length (100%) of recovered drill core for each drill hole has been logged.
Sub- sampling techniques and sample	 If core, whether cut or sawn and whether quarter, half or all core taken. If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry. For all sample types, the nature, quality and appropriateness of the sample preparation technique. 	 Drill core was cut in half using an automatic core saw. Drill core was cut slightly off the orientation line, with sampling of the half core that did not have the orientation line. Individual sample intervals were collected to match previous geochemical sampling intervals. These were



Criteria	JORC Code explanation	Commentary
preparatio n	 Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples. Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling. Whether sample sizes are appropriate to the grain size of the material being sampled. 	 then grouped into composites generated to match anticipated mining grades based on knowledge at the time the samples were collected. Samples for the Pyroxene Lead-Silver mineralisation were selected from MRN22003 and MRN22003W1 and comprised a total length of 27.1m of drill core. The composite sample had a weight of 81kg. Samples for the Primary Copper Mineralisation were taken from MRN22001, MRN22001A and MRN23004W2. The first Primary Copper Mineralisation sample (MRN22001 and MRN22001A) comprised 26.5m of drill core, and had a weight of 52kg. The second primary Copper Mineralisation sample (MRN23004W2) comprised 20m of drill core and weighed 58kg. Samples for weathered copper mineralisation were taken from MRN23005 and MRN23013 and comprised 17m of drill core and had a weight of 53kg. Samples were selected from available drill core and selected to be representative of the targeted mineralisation domains.
Quality of assay data and laboratory tests	 The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total. For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc. Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established. 	• Not Applicable
Verification of sampling	 The verification of significant intersections by either independent or alternative company personnel. The use of twinned holes. 	Not Applicable



Criteria	JORC Code explanation	Commentary
and assaying	 Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols. Discuss any adjustment to assay data. 	
Location of data points	 Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation. Specification of the grid system used. Quality and adequacy of topographic control. 	 Previously reported MRN22001A - ASX:MMA 15/9/2022 MRN22001 - ASX:MMA 24/11/2022 MRN22003/MRN22003W1 - ASX:MMA 16/1/2023 MRN23004W2 - ASX:MMA 20/6/2023 MRN23005 - ASX:MMA 29/5/2023 MRN23013 - ASX:MMA 20/9/2023
Data spacing and distribution	 Data spacing for reporting of Exploration Results. Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied. Whether sample compositing has been applied. 	 Samples selected for Metallurgical testwork were selected prior to Maronan Metals announcement of the 2024 Resource Review (ASX: MMA:12/3/2024). Samples for the pyroxene Lead-Silver mineralisation are taken from within the inferred resource. All Copper-Gold samples were selected from within inferred resource.
Orientation of data in relation to geological structure	 Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type. If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material. 	 Previously reported MRN22001A - ASX:MMA 15/9/2022 MRN22001 - ASX:MMA 24/11/2022 MRN22003/MRN22003W1 - ASX:MMA 16/1/2023 MRN23004W2 - ASX:MMA 20/6/2023 MRN23005 - ASX:MMA 29/5/2023 MRN23013 - ASX:MMA 20/9/2023
Sample security	• The measures taken to ensure sample security.	 Drill core is kept at the drill rig which is manned 24/7 until it is collected by Maronan Metals personnel. Maronan Metals personnel transport the drill core to Maronan Metals yard in Cloncurry. The yard in Cloncurry is secured by a six foot fence and gates are locked at all times when no personnel are at the yard. Samples are for Metallurgical Testwork were collected from the Maronan Metals yard by Team Global Exporess Couriers and transported directly to Core



Criteria	JORC Code explanation	Commentary
		 Metallurgy and ALS Metallurgy Burnie. Samples are transported in bulka bags sealed with a cable tie. Upon receipt on samples at both labs were checked against the dispatch, and a sample receipt sent to Maronan Metals confirming the dispatch details.
Audits or reviews	 The results of any audits or reviews of sampling techniques and data. 	 No audits or reviews of the sampling techniques and data have been conducted

1.2 Section 2 Reporting of Exploration Results

(Criteria listed in the preceding section also apply to this section.)

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	 Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings. The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area. 	 Maronan is located within EPM 13368 situated in the Cloncurry region of north-west Queensland. EPM 13368 is owned 100% by Maronan Metals Limited. No material ownership issues or agreements exist over the tenement. An ancillary exploration access agreement has been established with the native title claimants and a standard landholder conduct and compensation agreement has been established with the pastoral lease holders. The tenement is in good standing and no known impediments exist
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	• The extent of mineralisation at Maronan has been defined by 87 diamond core drill holes drilled by six different companies since 1987 until the present (Table 10). Shell Minerals/Billiton/Acacia discovered base metal mineralisation on the project in 1987 and completed 16 shallow holes to 1993. From 1995 to 1996 MPI completed 3 holes into the northern and southern fold hinge structures. From 2001 to 2004 Phelps Dodge



Criteria	JORC Code explanation	Commentary
		completed 6 holes. BHP Cannington undertook a campaign of lead-silver exploration from 2006 to 2008 completing 13 holes. Red Metal Limited completed 16 holes from 2011 to the 2019 seeking depth extensions to the bedded lead-silver and separate copper-gold mineralisation. Maronan Metals was spun out of Red Metals in 2022 and has subsequently drilled seven holes and is continuing to explore the Maronan project.
Geology	Deposit type, geological setting and style of mineralisation.	 Exploration on Maronan has identified three separate styles of mineralisation, bedded lead-silver mineralisation partially overprinted by structurally controlled, copper-gold mineralisation, and gold only mineralisation The lead-silver mineralisation is of a similar style to the nearby Cannington deposit, one of the world's largest silver and lead producing operations. The Maronan lead-silver mineralisation occurs in two separate but sub-parallel banded carbonate-lead sulphide-magnetite-calcsilicate units referred to as the Western Horizon (Upper) and Eastern Horizon (Lower. The two horizons can be separated by up to 100 metres of quartz clastic meta-sediments (psammites, pelites and quartzite). At the Northern Fold structure the Eastern horizon is folded forming a steep plunging tight to isoclinal fold structure with attenuated or transposed limbs and a thickened hinge zone region. The overprinting copper-gold mineralisation styles at the nearby Eloise and Osborne ore bodies. Mineralisation is associated with intense silica alteration within a



Criteria	JORC Code explanation	Commentary
		 bedding-parallel structure focused between the Western and Eastern Lead-Silver mineralised zones and comprises strong pyrrhotite with variable chalcopyrite and minor magnetite. Gold only mineralisation occurs in the Northern Fold area, up-pluge on bedded Lead-Silver mineralisation within the Eastern Horizon and is associated with strong magnetite alteration. This zone appears to transition down-plunge to carbonate dominant alteration that hosts the lead silver mineralisation. Lead-Silver and Copper-Gold styles of mineralisation appear to show improvement in grade and widths at depth and remain open down-plunge and at shallow levels between the existing wide spaced intercepts.
Drill hole Information	 A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes: easting and northing of the drill hole collar elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar dip and azimuth of the hole down hole length and interception depth hole length. If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case. 	 Drill hole details for all holes included in the Metallurgical testwork have been previously reported: MRN22001A - ASX:MMA 15/9/2022 MRN22001 - ASX:MMA 24/11/2022 MRN22003/MRN22003W1 - ASX:MMA 16/1/2023 MRN23004W2 - ASX:MMA 20/6/2023 MRN23005 - ASX:MMA 29/5/2023 MRN23013 - ASX:MMA 20/9/2023
Data aggregatio n methods	 In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated. Where aggregate intercepts incorporate short lengths of high 	Not Applicable



Criteria	JORC Code explanation	Commentary
Relationshi p between mineralisati on widths and intercept	 grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail. The assumptions used for any reporting of metal equivalent values should be clearly stated. These relationships are particularly important in the reporting of Exploration Results. If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported. If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole 	 Previously reported MRN22001A – ASX:MMA 15/9/2022 MRN22001 – ASX:MMA 24/11/2022 MRN22003/MRN22003W1 – ASX:MMA 16/1/2023 MRN23004W2 – ASX:MMA 20/6/2023 MRN23005 – ASX:MMA 29/5/2023
lengths Diagrams	 Appropriate maps and sections (with scales) and tabulations of 	 MRN23013 – ASX:MMA 20/9/2023 See diagrams included in the report
	intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.	
Balanced reporting	 Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results. 	 Not Applicable
Other substantive exploration data	 Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances. 	 This announcement relates primarily to the reporting of Metallurgical Sighter Testwork completed by Maronan Metals on Pyroxene style Lead-Silver mineralisation, and Primary and Weathered Styles of Copper Mineralisation. Samples of the Pyroxene Lead-Silver mineralisation was taken from MRN22003 and MRN22003W1. Samples of the Primary Copper Mineralisation were taken from MRN22001 A, MRN22001 and MRN23004W2 Samples for the Weathered Copper Mineralisation were taken from MRN23005 and MRN23013.



Criteria	JORC Code explanation	Commentary
		 Metallurgical testwork was completed by Core Metallurgy (Brisbane) and ALS Metallurgy (Burnie). Samples were subject to Floatation testwork as well as geopyora rock breakage tests to provide preliminary comminution parameters including Bond Ball Mill Work index results. Head Assay and QRXD analysis were calculated for all samples. Comprehensive concentrate assays were completed for all samples to check concentrate grades and to assess for potentially deleterious elements reporting to the concentrate. A summary of all key results from the metallurgical testwork are included in the body of this report
Further work	 The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling). Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive. 	 Maronan Metals Ltd is well funded and intends to continue with ongoing exploration at the Maronan Project. A program of approximately 10,000m drilling is being planned to test the high-quality targets at Maronan. See previous ASX Release (ASX:MMA; 29 April 2022; MMA Investor Presentation) which shows proposed exploration areas to be targeted by Maronan during this drilling campaign



APPENDIX 2

ASSAY DATA OF TYPICAL COPPER CONCENTRATE AND PYROXENE-HOSTED LEAD-SILVER ORE CONCENTRATE.

		Copper	Concentrate	Lead Concentrate		
Element	Unit	Assay	Typical Penalty Limit	Assay	Typical Penalty Limit	
S	%	31.4		24.3		
F	%	0.6	0.033	0.7	0.02	
As	ppm	203	2000	385	2000	
СІ	%	0.023	0.02	0.104	0.02	
SiO2	%	4.27		1.9		
Ag	ppm	45		191		
AI	%	0.25		0.11		
Bi	ppm	64	500	669	300	
Ca	%	0.82		0.86		
Cd	ppm	23.3		33.1		
Co	ppm	732		1690		
Cu	%	27.2		5		
Fe	%	26.3		19.9		
Hg	ppm	<10	10	<10	20	
Mg	%	0.04		0.07		
Ni	ppm	80		261		
Pb	%	5.2	1	45		
Sb	ppm	410	1000	252	1000	
Sn	ppm	10		<10		
Те	ppm	<10		30		
Th	ppm	<20		<20		
U	ppm	<10		<10		
Zn	%	0.21	3	0.16		
S	%	>10.0		>10.0		



APPENDIX 3 METALLURGICAL DOMAIN SAMPLES

Lead-Silver		Primary	Copper		Primary
Pyroxene-hosted			Low Grade		
HOLEID	From	То	HOLEID	From	То
MRN22003W1	517	518	MRN23004W2	551	552.2
MRN22003W1	518	519	MRN23004W2	552.2	553
MRN22003W1	519	520	MRN23004W2	553	555
MRN22003W1	543	544	MRN23004W2	554	555
MRN22003W1	544	545	MRN23004W2	555	556
MRN22003W1	563	564	MRN23004W2	556	557
MRN22003W1	620	621	MRN23004W2	557	558
MRN22003W1	621	622	MRN23004W2	558	559
MRN22003W1	622	623	MRN23004W2	559	560
MRN22003W1	623	624	MRN23004W2	560	561
MRN22003	534	535	MRN23004W2	578	579
MRN22003	535	536	MRN23004W2	579	579
MRN22003	556	557	MRN23004W2	580	581
MRN22003	580	581		580	581
	580	581	MRN23004W2 MRN23004W2	581	582
MRN22003 MRN22003	583	584	MRN23004W2 MRN23004W2	582	582.7
	595	590	MRN23004W2		
MRN22003				583.5	584
MRN22003	597	598	MRN23004W2	584	585
MRN22003	598	599	MRN23004W2	585	586
MRN22003	599	600	MRN23004W2	586	587.2
MRN22003	600	601	MRN23004W2	587.2	588
Copper – Mixed Sulphide		Transitional	Copper-Lead		Primary
Low Grade	From	То	Low Grade	Гионе	Та
HOLEID	From		HOLEID	From	To
MRN23005	96	96.8	MRN22001	799	800
MRN23005	96.8	97.6	MRN22001	800	800.8
MRN23005	97.6	98	MRN22001	800.8	802
MRN23005	98	99	MRN22001	802	803
MRN23005	99	100	MRN22001	803	804
MRN23005	100	101	MRN22001	804	805
	_		MRN22001	805	806
HOLEID	From	То	MRN22001	806	807
MRN23013	191	192	MRN22001	807	808
MRN23013	192	193	MRN22001	808	809
MRN23013	193	194	MRN22001	809	810
MRN23013	194	195	MRN22001	810	810.7
MRN23013	195	196.4	MRN22001	810.7	812
MRN23013	196.4	197.45	MRN22001	812	813
MRN23013	197.45	198	MRN22001	828	829
MRN23013	198	199	MRN22001	829	830
			MRN22001	830	831
			MRN22001	831	832
			MRN22001A	739	740
			MRN22001A	740	741
			MRN22001A	741	742
			MRN22001A	742	743
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